PLATTSBURGH AIR FORCE BASE

NEW YORK

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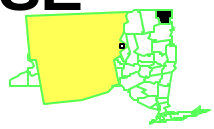

REGION 2
CONGRESSIONAL DIST. 24
Clinton County
Plattsburgh

Site Description

The 3,440-acre Plattsburgh Air Force Base site served as a tactical wing in the Air Force Strategic Air Command from 1955 to 1991, when it was reassigned as an Air Refueling Wing under the Air Mobility Command. From 1955 to 1995, hazardous wastes were generated from activities including aircraft operation, testing and maintenance, fire fighting exercises, the discharge of munitions, and landfill operations. The site is located in a mixed use area consisting of industrial and commercial enterprises, as well as private residences. It is bordered on the north by the Saranac River and the city of Plattsburgh, and on the south by the Salmon River. Lake Champlain, located east of the base, forms approximately one mile of the base boundary. Approximately 2,000 people obtain drinking water from private wells located within 3 miles of the base. Volatile organic compounds (VOCs) were found in shallow monitoring wells downgradient of the hazardous materials storage area at the Defense Reutilization and Marketing Office (DRMO Site) during investigations conducted by the Air Force in 1987. Since that time, the Air Force has conducted Preliminary Assessments (PAs), Site Investigations, and Remedial Investigations at over forty sites at the base. This includes sampling and analysis of soil, groundwater, surface water, and sediment.

Site Responsibility:

This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 07/14/89
Final Date: 11/21/89

Threats and Contaminants

Unburned off-spec JP-4 jet fuel and waste solvents used during activities at the Fire Training Area have contaminated soils and groundwater, resulting in groundwater plumes of fuel-related compounds and chlorinated solvents. The chlorinated solvent plume is over one mile in length, reaching within 2000 feet of Lake Champlain, while the fuel-related plume extends approximately 4,000 downgradient of the site. Four unlined landfills were utilized at the base during various periods of operation for disposal of household wastes and construction debris, and hazardous wastes may have been dumped periodically in the landfills. Leachate from two of the landfills was found to be contaminated with VOCs (including fuel-related compounds) and pesticides, and VOC contamination was detected in groundwater downgradient of the landfills. Soils contaminated with DDT were found at the DRMO storage/maintenance area, the result of leaking drums used to store pesticides at the site. Spillage of solvents used at the Building 2774 and Heavy Equipment Maintenance Facilities contaminated soil and groundwater with dichlorobenzene, trichloroethene (TCE) and other VOCs. The failure of an underground storage tank (UST) used to store waste solvents at the Nose Dock 8 Facility has resulted in soil and groundwater contamination with chlorinated solvents.

Potential exposures include direct contact with contaminants found in soil and surface water. Although groundwater at the base is not currently used as a drinking water supply (drinking water is supplied by the City of Plattsburgh), offbase residents living in close proximity to the base could be exposed to contaminants if infiltration of private groundwater wells were to occur. Contaminant migration in groundwater and surface water is currently being studied and addressed on a basewide level with respect to the potential for negative impacts on human and ecological receptors associated with Lake Champlain, the Salmon River, the Saranac River, and offbase groundwater users.

Cleanup Approach

Contamination at the base thus far has been addressed through a series of interim (Removal) and Remedial Actions. Additional Removal Actions are currently in progress at several sites, and a number of these are expected to be continued as long term Remedial Actions. Additional cleanup actions other than those specified in this fact sheet could still be necessary based on the results of current and future investigations to be conducted at the base.

Response Action Status

Initial Actions: Removal Action: DRMO Storage/Maintenance Area: This facility consisted of several small buildings used for storage and office space and an adjacent, paved open storage area. Its function was to handle materials discarded by the Air Force, such as transformers and refrigerators, that might have had reclaimable components. One or more drums stored at the site leaked pesticides onto site soils resulting in contamination with DDT and other pesticide compounds. A Removal Action consisting of the excavation of approximately 600 cubic yards of DDT-

contaminated soil was conducted in 1992. The soil was disposed off-site.

Removal Action: Civil Engineering Squadron (CES) Pesticide Tank: This UST received rinse water from the washing of pesticide containers and application equipment. It was suspected that the tank had leaked, and as a result, a Removal Action was conducted in 1992. The tank and surrounding soil to a depth of two feet were excavated and disposed offsite. The excavated soil was found to be contaminated with dursban, a commonly used pesticide. The tank contents was tested and found to contain dursban and methoxychlor. The tank contents was also disposed offsite.

Removal Action: Industrial Pre-Treatment Facility: This facility received wastewater from airplane washrack and painting facilities. A tank that formed the basement of the building was suspected of leaking, which would have caused the surrounding soils to be contaminated with lead and other compounds. A Removal Action, consisting of the removal of the tank contents to a publicly owned treatment works (POTW) and filling of the tank with concrete was conducted in 1993.

Removal Action: Building 2774: This building contained a former hazardous materials/waste storage area. Soils at the site were found to be contaminated with dichlorobenzene, metals, and organics, and a groundwater plume consisting of solvent-related contamination extends downgradient from the site. An initial Removal Action consisting of the excavation of soils contaminated with over 200 parts per billion (ppb) of dichlorobenzene was conducted in 1992. The contaminated soils were disposed offsite at an incinerator.

Removal Action: Old Small Arms Range: Soils at this site were contaminated with lead due to the discharge of small arms used by base personnel during target practice. Most of the contamination was found in the earthen berm used as a backstop for fired bullets. A Removal Action was conducted in 1994 during which soils were excavated and screened to remove bullets. Soils remaining from the screening process were solidified using a cement based agent and then crushed. Based on soil sampling results from the initial Removal Action, an SI was conducted at the site in 1995 to more precisely delineate the full extent of lead contamination in site soils. As a result of the SI, additional soil excavation and offsite disposal was conducted in 1996 and 1997.

Removal Action: Heavy Equipment Maintenance Facility: Soils contaminated with fuel-related compounds and solvents released at this site were excavated in 1997. Soils were excavated to a depth of approximately four feet and were then sampled to determine the appropriate treatment and disposal methods. Soils with greater than 5 ppm of TCE were disposed offsite and soils with less than 5 ppm of TCE (approximately 8,000 cubic yards) were placed in the base landfarm. After confirmatory sampling showed that the soils had been adequately remediated, the soils were used as fill elsewhere onbase.

Removal Action: Munitions Maintenance Squadron Site: These facilities were used from 1954 to 1991 for the maintenance, storage and handling of munitions-related items. Contaminants of concern in site soils include toluene and various carcinogenic polynuclear aromatic hydrocarbons (PAHs). A Removal Action consisting of the excavation of “hot spots” in site soils (specifically those near the former waste accumulation area at the site) was conducted in August 1997. After confirmatory sampling showed that the soils had been adequately remediated, the soils were used as fill elsewhere onbase.

Removal Action: Fire Training Area Source Operable Unit: Operation of a removal system (aquifer drawdown, pumping, and skimming) for free product found at the top of the groundwater table at the site commenced in April 1993 (Removal Action) and is still in progress

under the March 2001 ROD for this OU. Thus far approximately 19,500 gallons of free product have been recovered. The Remedial Action currently underway at the 15 acre site consists of the original Removal Action systems including pumping of groundwater at the site to achieve an approximately two foot drawdown of the water table in the unconfined aquifer, Bioventing of site soils to a depth of 35 feet (including the "smear zone" exposed by the aquifer drawdown), Soil Vapor Extraction (SVE) with off-gas treatment at one of the former pits where chlorinated solvent contamination was most extensive, and treatment of the extracted groundwater at the site treatment plant via air stripping and carbon adsorption.

Remedial Actions Completed: Landfill LF-023: This 500 by 800 by 30 foot landfill received domestic wastes and construction debris from 1966 to 1981. Soil and fill are contaminated with metals, organics, and PCBs. The maximum volume of fill is estimated to be 406,000 cubic yards. The Remedial Action implemented at this site includes a NYSDEC Part 360 Landfill Cap (single impermeable layer), landfill gas detection/management system, long term groundwater monitoring, and institutional controls. Construction of the remedy was completed in September 1994.

Landfill LF-022: This 500 by 1200 by 30 foot landfill received domestic wastes from 1959 to 1966. Soil and fill are contaminated with metals and organics. The volume of fill is estimated to be 524,000 cubic yards. The Remedial Action implemented at this site includes a landfill cap, gas detection/management system, long term groundwater monitoring, and institutional controls. Construction of the remedy was completed in September 1995.

Landfill LF-024: This one acre construction / demolition landfill was used from 1980 to 1986. Soil and fill are contaminated with metals. EPA's Presumptive Remedy for Military Landfills was selected for remediation of this site. The remedy includes a native soil cover, long term groundwater monitoring, and institutional controls. Construction of the remedy was completed in November 1997.

Landfill LF-021: This six acre landfill was used from 1956 to 1959 for the disposal of municipal wastes, construction and demolition debris, and sludge from the base waste water treatment plant. Soil and fill are contaminated with VOCs, SVOCs, PCBs, and pesticides. EPA's Presumptive Remedy for Military Landfills was selected for remediation of this site. The remedy includes a native soil cover, long term groundwater monitoring, and institutional controls. Construction of the remedy was completed in December 1997. Because treated soils from the base landfarm were used for the soil cover at this landfill, the Air Force estimates that over a million dollars in disposal and fill costs were saved by the Department of Defense. The base landfarm consisted of approximately 20,000 cubic yards of soil excavated mainly during the basewide UST and Oil/Water Separator removal project. Treatment in the landfarm consisted of the tilling of soils until sampling results indicated that the soils had been adequately remediated.

Removal Actions In Progress: Building 2774: A second Removal Action at this site, consisting of the installation and operation of SVE, bioventing, and biosparging systems at the site for treatment of soils contaminated by chlorinated solvents and fuel-related compounds, was initiated in December 1996. Construction of the systems was completed in May 1997 and the systems have been in operation since that time. Sampling conducted in late 2001 indicated that the Removal Action has successfully remediated site soils. Signature on a Record of Decision (ROD) documenting this and calling for no further action for site soils took place in July 2002. The removal systems will be shut down on July 12, 2002.

Nose Dock 8 Aircraft Maintenance Facility: A UST/sump at this facility ruptured in 1987, releasing approximately 2,000 gallons of hazardous wastes (mainly solvents) into the surrounding soils. As a result of the release, a groundwater contaminat plume consisting mainly of TCE and its derivatives developed downgradient of the site. The Air Force conducted an onsite Treatability Study involving groundwater extraction and treatment as well as SVE. The groundwater extraction and treatment system consisted of a single pumping well and used an air stripping and carbon adsorption treatment process. Both the pump and treat and SVE systems came on line in the Spring of 1997. The Treatability Study was terminated as results indicated that adequate remediation was not taking place. Additional investigation of the site was conducted during 2000 and 2001, and the need for additonal remedial activities is currently being studied through a Feasibility Study (FS) and Supplemental Evaluation.

Munitions Maintenance Squadron: A second Removal Action was initiated during the Summer of 2000 at the former location of a previously-removed underground storage tank (UST) at this site. Approximately 500 cubic yards of soil contaminated with fuel-related compounds was excavated and disposed offsite.

Records of Decision: Records of Decision (RODs) for source control at landfills LF-022 and LF-023 were signed on September 30, 1992. A separate ROD for groundwater, surface water, and sediment at Landfill LF-023 was signed in March 1995. The groundwater, surface water, sediment ROD includes institutional controls (deed restrictions on withdrawal of groundwater) and additional long term groundwater monitoring, and requires that additional actions be taken if groundwater criteria specified in the ROD are exceeded. RODs were signed for the other two landfills at the base (LF-021 and LF-024) in March 1997.

DRMO Storage/Maintenance Area: A No Further Action ROD documenting successful completion of the Removal Action at this site (see above) was signed in March 1993. Groundwater investigation and remediation at this site is being addressed as part of the Fire Training Area / Industrial Area (FTA/IA) Groundwater Operable Unit.

Pesticide Tank ROD: A No Further Action ROD documenting successful completion of the Removal Action at this site (see above) was signed in March 1995.

Non-Destructive Inspection Facility and Aerospace Ground Equipment Facility: RODs addressing

soils at these sites were signed in April 1998. The RODs call for implementation of Institutional Controls including deed/lease restrictions that will limit development of the sites to non-residential uses and deed/lease restrictions prohibiting the withdrawal of groundwater from the sites. Groundwater at the sites is being addressed as part of the FTA/IA Groundwater Operable Unit RI/FS, and groundwater monitoring at the sites will be included in the FTA/IA remedial action.

Heavy Equipment Maintenance Facility: A ROD documenting completion of the previous Removal Action at the site (excavation and treatment/disposal of 9,000 cubic yards of fuel and chlorinated solvent-contaminated soils), and calling for no further action at the site, was signed in September 2000.

Old Small Arms Range: A ROD documenting the previous Removal Actions at the site (removal of lead-contaminated soils), and calling for excavation of additional arsenic-contaminated soils, was signed in May 2001. Remedial Action is currently underway.

Fire Training Area Source Operable Unit: This site consists of an open area used from 1960 to 1989 for training of the base's fire department. JP-4 jet fuel was originally burned on the open ground and in airplane mock-ups, eventually four unlined pits were used. Waste solvents and other compounds were also burned at the site. Although two of the pits were evntually lined with cement and stabilized, large quantities of jet fuel and solvents infiltrated soils and groundwater at the site. A ROD calling for continuation of the previously installed removal systems, with upgrade and expansion, was signed in March 2001.

Building 2774 Aircraft Engine Maintenance Facility: A ROD documenting completion of the two previous Removal Actions at the site (excavation and offsite disposal of 200 cubic yards of fuel and chlorinated solvent-contaminated soils, and operation of SVE, Bioventing, and Biosparging systems), and calling for no further action at the site, was signed in July 2002.

Remedial Actions In Progress: Old Small Arms Range: Additional sampling to confirm that cleanup was complete at this site was conducted in 2000. Arsenic contamination was discovered and subsequently delineated. A ROD calling for excavation of arsenic-contaminated soils was signed in May 2001, and soil excavation began in the summer of 2001. Confirmatory sampling conducted after the initial excavation revealed that additional soil needed to be removed. This is scheduled for the Spring and Summer of 2002.

Fire Training Area Source Operable Unit: Design of the modifications and upgrades to the remedial systems called for in the ROD is currently underway. Operation of the systems installed during the Removal Actions continues.

Fire Training Area / Industrial Area (FTA/IA) Groundwater Operable Unit: A draft ROD addressing fuel and solvent contamination in groundwater at the Fire Training Area (Site FT-002) and in the industrial area of the base is currently under review. The preferred alternative consists of the construction of three interceptor trenches, a permeable reactive wall,

extraction and treatment of groundwater withdrawn from the plume core, extensive long term groundwater monitoring, and institutional controls (ICs) to address remediation of the contaminant plume. To address concerns regarding possible off-base migration of the FT-002 plume prior to final remedy selection, sentry wells were installed on the eastern side of the base during 1997. Although signature on this ROD has been delayed
due to a national dispute between DOD and EPA on EPA's post-ROD authority and Ics, design work on the remedy is proceeding.

Additional Areas of Concern: The Air Force is currently investigating fourteen additional sites at the base as "EBS Factors". These involve previously unevaluated sites that are contained within parcels that have been considered high priority for the purpose of property transactions.

Cleanup Progress

Completed and planned activities to remove contaminants from soils and groundwater have reduced and will continue to reduce the potential for exposure to these materials. Results of many of the Removal Actions and Remedial and Site Investigations will be finalized during 2002. Selection of final remedies for these sites will follow shortly thereafter. As stated above, addtional investigations are still underway at the base.

Site Facts: Cleanup at Plattsburgh Air Force Base is conducted under the Installation Restoration Program established by the DoD in 1978 to identify, investigate, and control hazardous contaminants at DoD facilities. The base was slated for closure in 1993 under the Defense Base Closure and Realignment Act of 1990 (BRAC), and was formally closed on September 30, 1995. In accordance with Presidential directive, environmental cleanup is being expedited in order to promote early reuse by the community. Over forty leases (covering the entire base) have been evaluated by EPA for the interim and long term use of various parcels and facilities at the Base. Each lease involves the development of a Site (lease) specific Environmental Baseline Survey (SEBS) that is documented in a formal Finding of Suitability To Lease (FOSL). Over 900 acres of the base was transferred to other parties during 2001 by a Public Benefit Transfer (PBT) through a 55 year lease in furtherance of conveyance. Five property transfers by deed with associated SEBSs and Findings of Suitability To Transfer (FOSTs) have been reviewed by EPA, and two parcels, consisting of approximately 104 acres, have actually been transferred to private parties. Participation by the regulatory agencies during the leasing and transfer of property is required by federal regulations.

Site Repository

Feinberg Library, State University of New York (SUNY)
Plattsburgh Campus, Plattsburgh, New York 12901